

DOCUMENT RESUME

ED 060 585

EC 041 513

AUTHOR Plowman, Paul D.  
TITLE California Mentally Gifted Minor Program: A Brief History.  
INSTITUTION California State Dept. of Education, Sacramento.  
PUB DATE Oct 71  
NOTE 36p.  
  
EDRS PRICE MF-\$0.65 HC-\$3.29  
DESCRIPTORS Educational Trends; \*Exceptional Child Education; \*Gifted; Historical Reviews; Program Descriptions; \*State Programs  
IDENTIFIERS \*California

ABSTRACT

The report concerns the California Mentally Gifted Minor Program, in which the state, through guidelines, consultant service, and extra funds, encourages school districts to provide qualitatively different and appropriate learning experiences for children in the upper 2% of general mental ability. The report outlines the historical roots and development of the program from 1925 to 1971, reviews major contributions of developmental projects made possible through USOE Cooperative-Research and Title V, Elementary and Secondary Act funds, and describes the current status of the program. Description of current status covers enrollment and expenditures, types of programs, concern for culturally disadvantaged underachieving gifted students, current program problems, suggested solutions, and trends. (KW)

ED 060585

U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
OFFICE OF EDUCATION  
THIS DOCUMENT HAS BEEN REPRO-  
DUCED EXACTLY AS RECEIVED FROM  
THE PERSON OR ORGANIZATION ORIG-  
INATING IT. POINTS OF VIEW OR OPIN-  
IONS STATED DO NOT NECESSARILY  
REPRESENT OFFICIAL OFFICE OF EDU-  
CATION POSITION OR POLICY

CALIFORNIA MENTALLY GIFTED MINOR PROGRAM

A Brief History

Submitted to the STATE BOARD OF EDUCATION

As Submitted at the request of the U. S. Office of  
Education for inclusion in a report to Congress (Fall,  
1971) by the U. S. Commissioner of Education

By Paul D. Plowman  
Consultant in the Education of the Mentally Gifted

EC 041 513 E

California State Department of Education  
Sacramento, California  
October, 1971

# CALIFORNIA MENTALLY GIFTED MINOR PROGRAM

## A Brief History

by

Paul D. Plowman

Consultant in Education of the Mentally Gifted

### Introduction

The State of California encourages school districts to provide qualitatively different and uniquely appropriate learning experiences for children in the upper two percent of general mental ability. Through guidelines, consultant service, and extra funds, the state seeks (1) to prepare over 100,000 mentally gifted minors for responsible and productive adult roles in government, business, and the professions; (2) to help each gifted child gain a realistic and healthy concept of himself--his strengths, his weaknesses, his areas of needed improvement, and his potentialities; and (3) to develop these children into intellectually and creatively capable, productive, and compassionate human beings.

Specific learner objectives are for the child:

1. To excel in academic attainment:

1.1 Through acquisition, organization, and evaluation of knowledge, and

1.2 Through perfecting skills of reading, writing, and use of numbers.

2. To become adept at such intellectual skills as:

2.1 Analysis of problems

2.2 Definition of problems

2.3 Identification of alternative solutions to problems

3. To create original and worthwhile products.

4. To gain leadership skills.

5. To acquire knowledge about a number of career possibilities:

5.1 Through which he might gain personal satisfaction and/or

5.2 Through which he might help to improve the society in which he lives.

Program inauguration and development are based upon:

1. Reported neglect of intellectually gifted children in the classrooms of the state.<sup>1</sup>
2. An awareness that these children have unique learning needs which require certain types of programs, learning experiences, materials, and teachers.<sup>2</sup>
3. Research evidence that shows "striking gains in achievement with accompanying personal and social benefits" resulting from special programs.<sup>3</sup>

Furthermore, it can be said that programs for gifted children are consistent with basic principles of American education and of American democracy and that such programs are logically a part of a broader concern for optimum development or full development of all children with special talents and special needs.

This report (1) outlines historical roots and development of the California Mentally Gifted Minor Program from 1925 to 1971; (2) reviews major contributions of developmental projects made possible through USOE Cooperative-Research and Title V, Elementary and Secondary Education Act funds; and (3) describes the current status of the program.

## Historical Roots and Development of the California Mentally Gifted Minor Program

Roots of the California program for children in the upper two percent of general mental ability extend back to the monumental research efforts of Lewis Terman of Stanford University. In 1925 he published his first volume of Genetic Studies of Genius.<sup>4</sup> This book described characteristics of 1,000 California gifted children. By 1951, San Diego and Los Angeles had established conceptually sound and comprehensive educational programs for gifted children and youth. In 1955 and 1956, personnel in the California State Department of Education held exploratory and planning meetings regarding the role of the state in encouraging school districts to make special provisions for these children. A California State Study conducted from 1957 to 1960 evaluated 17 different kinds of programs and 929 pupils and concluded:

"The special provisions made in these programs were beneficial for the gifted . . . participating pupils made striking gains in achievement with accompanying personal and social benefits."<sup>5</sup>

Per pupil support levels documented and recommended by the State Study in 1960 were: \$200 per pupil per year for additional operational expenses and \$40 per pupil for costs incurred in the initial identification of a child as a mentally gifted minor. Assembly Bill 361, passed in 1961, provided \$40 as the total amount available per pupil per year for both identification and operational expenses.

During the first year, school districts spent an average of \$83 per participating mentally gifted minor for these extra expenses. In-depth studies revealed program costs for special classes and counseling and tutoring still exceeded the recommended \$200 level.

At the present time (ten years after the start of the program) state money available to school districts for extra costs of identification and conducting a program amounts to up to \$40 for identification on a one-time basis and up to \$60 per pupil per year for the extra costs of instruction. Over the past ten years there have been a number of legislative bills submitted to the Legislature and studies made which pegged the needed support level at \$150 to \$200 per pupil, plus funds for identification.

Assembly Bill 361 (1961) also established a consultant service within the State Department of Education. During the first few years of the State Mentally Gifted Minor Program two consultants concentrated their attention upon interpreting legislation and rules and regulations to school districts throughout the state and developed guidelines for school districts to follow in inaugurating programs. Then in 1963, they procured \$249,000 of federal (USOE Cooperative Research) funds to demonstrate model aspects of four of the state program types. Since the conclusion of the federally financed project, California Project Talent, efforts have been directed toward developing exemplary curriculum guides and a statewide framework.

Key elements in the operation of mentally gifted minor programs are: procedures for identifying children as mentally gifted minors and for placing them in one or more programs approved by the State; consent of parents; written plans developed by school districts; and a case study on each child. The case study is prepared as part of the identification process and becomes the basis for planning suitable educational provisions for each child.

It is to the credit of many school administrators and interested civic groups that local school districts have over the past ten years contributed their own funds to augment the support provided by the state. During the first year of the program (1961-1962), school districts spent an average of \$83 of extra money per pupil in offering programs for mentally gifted minors. A few school districts spent as high as \$900 of extra money per pupil in offering such programs. The average per pupil extra expenditure for 1969-1970 was \$121. As the chart, "Enrollment and Expenditures", shows, the growth of pupil participation from 35,164 full-time equivalent pupils (over 38,000 individuals) in 1961-1962 to approximately 112,000 full-time equivalent pupils in 1970-1971. At the present time, 250 California school districts (with an estimated aggregate pupil population of about 95 percent of the state-wide pupil population) make special provisions for mentally gifted minors. State money available for the mentally gifted minor program in the 1970-1971 school year is approximately eight and one-half million dollars.

Authorized expenditures include the purchase of instructional materials, inservice education, salaries of consultants, and psychologists or psychometrists, transportation to areas of special learning (including field trips). Expenditures made under this program are to be those incurred solely for providing the special program and must be readily identifiable in the accounting records of the school districts. The expenses incurred shall also be directly related to pupils enrolled during the fiscal year in the special program and would not have occurred had the program not been initiated.

The following chart outlines expenditures authorized from 1961-1962 through 1969-1970. It also shows enrollments for the same period.



**ENROLLMENT AND EXPENDITURES**  
**- Mentally Gifted Minor Program**

(a)	(b)	(c)	(d)	(e)
Fiscal (school) Year	One Semester	One Year	Full-Time Equivalents	Number of School Districts
1961-62	7114	31607	35164	188
1962-63	8408	54446	58650	225
1963-64	11281	65972	71613	246
1964-65	11084	77865	83407	273
1965-66	11248	81113	86738	262
1966-67	11859	85534	91464	260*
1967-68	18935	88841	98309	254
1968-69	21117	98248	108807	244*
1969-70	16740	100638	109008	248*

Enrollment and expenditure data are from Fiscal Year Apportionment Reports and computer-run fiscal-year summaries.

\*Estimates

Column "C" contains summer program enrollments as one semester.

Enrollment Estimates (Full-time Equivalents)

1970-71 - 111,692

1971-72 - 117,300

(f)	(g)	(h)	(i)
Expenses Reported	State Allowance	Local Expenditure	Percentage: Local Expenditures of Expenses Reported
2,936,736		2,936,736	100
3,247,062	1,342,439	1,904,623	58.7
3,433,871	2,216,781	1,217,090	35.4
3,983,217	2,678,454	1,304,763	32.8
4,423,880	3,124,986 Minus 40,726	1,258,168	28.4
6,896,950	3,281,605 Minus 62,269	3,553,076	51.5
12,162,637	4,547,463	3,204,395	26.3
13,644,322	3,695,099	9,969,223	73.0
13,175,217	7,937,720	5,216,566	40.0

Excess cost reimbursement basis of funding 1961-62 to 1966-67. Current cost basis of funding 1967-68 to present (3/18/71).

The drop in the total allowance for 1968-69 is attributed to a return to an annual support level of \$40 per mentally gifted minor. (See interpretation and attachment from Vol. XVIII, No. 1, March 1970, Special Education Newsletter.)

\*The arrows from Column "g" to Column "f" indicate that these "state allowances" were paid on an excess cost reimbursement basis to offset at least a portion of the extra expenses incurred during and reported for the previous school (fiscal) year.



Developmental activities from 1961 to 1971 include the demonstration project, California Project Talent (1963-1966), and a more recent Title V, ESEA project (1968-1969) to prepare a statewide framework on gifted child education and exemplary curriculum guides. These activities are described below under "Development, Demonstration, and Dissemination Projects".

For a more detailed review of changes made in funding and operating the California Mentally Gifted Minor Program, note the attached article, "Mentally Gifted Minor Program Indicates Progress Overall During the Past 45 Years: 1925-1969".

## Development, Demonstration, and Dissemination Projects

### California Project Talent--A U.S. Office of Education Cooperative Research Project

The ERIC( Educational Resources Information Center, USOE) resume of the final report of California Project Talent to the U.S. Office of Education contains the following abstract statement:

"California Project Talent was a 3½-year project which demonstrated four types of programs for mentally gifted children and youth."

"The enrichment demonstration:

- (1) Analyzed the needs for inservice training of teachers and developed appropriate workshops; and
- (2) Invented, field-tested, and disseminated special pupil units in
  - (a) scientific discovery, methodology, and investigation through a study of graphic representations of statistical information using the Bloom Taxonomy;<sup>7</sup>
  - (b) creative expression through a study of the literary element of characterization using Guilford's Structure of Intellect Model;<sup>8</sup> and
  - (c) critical appreciation through a study of the fundamental forms of music using Bruner's Process of Education.<sup>9</sup>

"The acceleration demonstration involved individual placement procedures and accelerated pupils from grade two to grade four by using a special summer session and by employing extensive case studies, counseling, and tutoring.

"The counseling-instructional demonstration showed interrelated goals, processes, and contents of English, social science, guidance, and small-group counseling designed to improve communication skills, encourage development of values and a philosophy of life, and promote more effective learning in social sciences and in English in grades 7-9.

"The special class demonstration showed the unique value of the all-day, full-week special class setting in improving (1) problem solving; (2) the ability to apply facts and principles; and (3) insight into the nature of learning.

"Overall:

- (1) Four new programs were invented, adopted, demonstrated, and disseminated;
- (2) Related consultant, teacher, and counselor roles were described;
- (3) Products produced included a film series, filmstrip, and program guidelines; and
- (4) Gifted child programs were promoted, enriched, and expanded."<sup>10</sup>

Curriculum Evaluation and Development for Mentally Gifted Minors--A federally financed, Title V, Elementary and Secondary Education Act Project (1968-1970)

Now in final stages of editing and printing are a tentative state framework\* and 21 exemplary curriculum guides. Subject areas represented are English, mathematics, social sciences, art, music, and foreign languages. Each of the guides contains uniquely appropriate behavioral objectives, major concepts and generalizations, teaching approaches and learning activities which reflect learning theories and processes eliciting higher levels of thinking, a sample lesson plan, a sample unit plan, and suggested sources of materials.

In the application for the \$85,000 Title V, ESEA grant the following statement was made as to how the proposed project would significantly "develop, improve, and expand activities" of the California State Department of Education:

"This project seeks to develop curriculum models uniquely tailored to the needs of intellectually gifted children. The typological approach suggested should have a spreading effect and result in improvement of programs planned for other typologies of children.

"This project should stimulate reevaluation of all existing curriculum and encourage the selection and preparation of curriculum guides, teaching guides, and sample materials (including textbooks) which foster systematic improvement of higher intellectual skills and specific traits of creativity in pupils.

"Another anticipated outcome is the construction of inservice education and teacher training programs which will help teachers become skilled educational diagnosticians and prescription experts--persons able to orchestrate optimum development of the gifted."

\* "Framework--Objectives, Principles, and Curriculum for Mentally Gifted Minors"

## Current Status of the Program

Today the California Mentally Gifted Minor Program is an example of a categorical aid program that has from its inception specified intents (objectives), in terms of the uniqueness of children in that category. Obvious examples of this are the demonstration projects, publications, and guidelines which stress the importance of deliberate and effective development of higher intellectual and creative skills. Prior program approval procedures, through which school districts qualify for "special allowances", involve careful scrutiny of program elements such as differentiated learner objectives, curriculum activities that elicit higher levels of thinking, the scheduling of each gifted child into 200 minutes per week of qualitatively different learning experiences, and the required annual review of pupil progress and of the operation of the program. Approval of continuing programs in the 1971-1972 school year is contingent upon review by the state of evaluative procedures and data on pupil progress and program effectiveness.

An interesting observation is that districts with mentally gifted minor programs have experienced a "spreading effect" involving improvement of the total educational program. This might be attributable to the focus upon the needs and requirement of a group (typology) of children with particular characteristics and recognition of and an attempt to meet the needs of other typologies of children. The spreading effect might also be attributable to the requirement of an individual case study and the use of it in placement of children and in planning educational experiences for them.

Another reason for this spreading effect could be growing recognition of the teacher as an orchestrator of higher intellectual and creative skills. The California Mentally Gifted Minor Program has promoted this concept through use since 1963 of certain models of educational objectives and of intellectual abilities. Especially useful in this regard have been the Taxonomy of Educational Objectives: Cognitive Domain and "The Structure of the Intellect".<sup>o</sup>

### Enrollment and Expenditures

As mentioned above, the current enrollment in the Mentally Gifted Minor Program is estimated at 111,700 full-time equivalent pupils, an increase from 35,200 during 1961-1962, the first year of the program. District participation rose during the same period from 188 to 250. Expenditures (from local and state funds) have increased from \$2,936,700 (1961-1962) to \$13,175,000 in 1969-1970. The total state contribution rose from \$1,342,000 to \$7,938,000.

The annual per pupil level of funding extra expenses is still a fraction of the \$250 per pupil amount documented as needed through the three-year study financed by the California State Legislature from 1957-1960. School districts receive up to \$40 per pupil for the initial cost of identification and up to \$60 per pupil per year for the cost of operating the program. The average per pupil expenditure for 1969-1970 was \$121. It is interesting to note that in 1969-1970, 26.3 percent of reported expenditures were from local school district funds. This increased to 73 percent in 1968-1969 and decreased to 40 percent in 1969-1970.

There exists currently a need for up to \$150 per pupil for program expenses and up to \$50 for the costs of identification. The validity of these figures has been documented in recent studies.

#### Types of Programs

The types of programs which the initial state regulations identified as appropriate for mentally gifted minors were:

1. Enrichment in regular classes.
2. Correspondence courses and tutoring.
3. Placement in advanced grades or classes.
4. Attendance in college classes by high school students.
5. Special counseling or instruction outside regular classrooms.
6. Special classes organized for gifted pupils.

In addition to there there was a seventh option that allowed for innovation in program design. Through this option, school districts could create and conduct a composite or comprehensive program or some other kind of program that could not be classified under the above-mentioned categories.

Changes in the state regulations in 1969<sup>6</sup> established two general categories of programs: (1) special services or activities and (2) special day classes.

Approved types of special services or activities are described as follows:

1. Pupils remain in their regular classroom but participate in supplemental educational activities planned to augment their regular educational program. While engaged in these activities, pupils use advanced materials or receive special help through persons other than the regular classroom teacher. These mentally gifted minors may be specially grouped within a regular classroom setting.
2. Pupils are provided with additional instruction by the school of attendance either by special tutoring or through correspondence courses. Correspondence courses are to be supervised by a certificated employee within the pupils' school of attendance.
3. Pupils are placed in grades or classes more advanced than their chronological age group and receive special instruction outside of the regular classroom in order to assist them in handling the advanced work.



4. High school pupils for a part of the day attend classes conducted by a college or junior college or participate in college advanced placement programs. Instruction may be carried out on either a high school or college campus.
5. Pupils participate regularly on a planned basis in a special counseling or instructional activity or seminars carried on during or outside the regular school day for the purpose of benefiting from additional educational opportunities not provided in the regular classroom in which the pupils are enrolled.
6. Special classes or seminars are organized to provide advanced or enriched subject matter for a part of the school day.
7. Pupils identified as culturally disadvantaged underachieving mentally gifted minors participate for a part of the school day in educational activities designed to assist them to overcome as soon as possible their cultural disadvantage and their underachievement and to enable them to achieve in their academic classes at levels commensurate with their individual abilities.
8. Other services or activities approved 90 days in advance by the Superintendent of Public Instruction.

The second category of programs is the special day class. This program option consists of one or more classes totaling a minimum school day\* and involves only those pupils identified as mentally gifted minors. These classes must be especially designed to meet the specific academic needs of mentally gifted minors for enriched or advanced instruction and must be qualitatively different from other classes in the same subjects in the school. These classes must be taught by a teacher who, in the judgment of the administrative head of the school district or the county superintendent has specific preparation, experience, and personal attributes desirable for a teacher of gifted children.

If a school district is to receive "special allowances" for the mentally gifted minor program, pupils must participate a minimum of 200 minutes per week in a "qualitatively different" instructional program for at least 17 weeks of a semester. A summer program of three 40-minute periods a day for 20 days may be counted as one of two possible semesters of "special allowance" entitlement.

It should be noted that this is a voluntary program and that to a large extent the small amount of money available to date has had a desirable seeding effect. However, many school districts find it necessary to limit their expenditures to only the money available from the state.

\* For Kindergarten--180 minutes; for Grades 1-3--230 minutes; and for Grades 4-12--240 minutes.



### Other Program Elements

Other requirements include careful identification of children as mentally gifted using all available evidence and procedures outlined in state regulations; consent of parents; development and maintenance of a case study on each child; and pupil participation at least 200 minutes per week in a program that is "qualitatively different" from the regular program of the school.

### Concern for Culturally Disadvantaged Underachieving Mentally Gifted Minors

Described above is a type of program through which it is hoped that these children will overcome their cultural disadvantage and their underachievement and achieve in their academic classes at levels commensurate with their individual abilities.

An entire issue of The Gifted Pupil,<sup>II</sup> a state newsletter on the mentally gifted minor program, was devoted to the needs and means of identifying and making special provisions for culturally disadvantaged underachieving mentally gifted minors. Although the state has suggested some ways for identifying these children, there still need to be prepared valid and reliable criteria for accomplishing this task.

### Problems and Some Suggested Solutions

A review of the current status of a program would be incomplete without identifying current problems, suggested solutions, and trends.

#### Problems

Eight problems confronting mentally gifted minor and talent development programs are:

1. Lack of general awareness and convincing evidence of the uniqueness and special value of educational provisions for gifted children.
2. Public concern about the lack of data showing the cost effectiveness of programs.
3. Inertia--tendency to maintain current program format, educational provisions, and administrative procedures.
4. Failure to allow, develop, and promote (a) a number of program options and (b) composite programs.
5. Lack of meaningful, credible, adaptable, and disseminatable program models.
6. Lack of an effective delivery system of pupil and program information.
7. Lack of trained personnel in program evaluation.

8. Need for teachers who are skilled professionals (diagnosticians, prescription experts, and evaluators) in developing higher cognitive skills and leadership skills--and in getting children to produce creative products.

#### Suggested Solutions

Credibility with respect to the uniqueness or special values of special educational provisions for gifted children can be developed through:

1. Procurement and dissemination of credible evidence of pupil progress in acquiring advanced knowledge, achieving outstanding proficiency in higher cognitive skills, producing creative products, demonstrating a high degree of effectiveness in applying leadership skills, and in artistic performance.
2. Formulation and use of behavioral objectives uniquely appropriate for gifted children as targets of intent for:
  - 2.1 Acquiring significant knowledge.
  - 2.2 Analyzing problems.
  - 2.3 Generating alternative solutions to problems.
  - 2.4 Creating original and worthwhile products.
  - 2.5 Leading other persons.
3. The design and/or application of evaluative methods and instruments that assess the degree to which individuals have attained behavioral objectives.
4. Cost effectiveness can be shown by detailing out the cost in terms of money, time of professional persons, etc., to provide children with certain experiences; to advance academic skills by established increments; to create certain products; to achieve a certain degree of knowledge acquisition as measured by standardized tests; and to be rated superior in performance of higher cognitive, creative, leadership, and artistic performance skills.

Inertia probably can best be overcome through creative reconceptualization of the program. This would necessitate an analysis of all parameters, generation and consideration of alternatives, synthesis of ideas, refinement and implementation of new or more effective programs for gifted and talented children and youth. Possibly needed at this time, would be the development of a number of valid program options in the design and implementation of master plans for full development of human potential.

5. Closely related to the previous idea would be that of establishing and describing credible, adaptable, and disseminatable program

models. These might be entirely new designs or modifications or replications of model programs previously demonstrated in California, Connecticut, Illinois, Minnesota, North Carolina, Ohio, and Oregon.

6. Effective delivery systems necessitate full-time expert personnel with knowledge of information storage, retrieval, processing, and dissemination. Such systems can deliver needed information on the progress of pupils and on the effectiveness of programs. They can also deliver data needed for identifying pupils as gifted and/or talented and for placing them in suitable educational programs.
7. There is at this time a need to prepare a reservoir of program evaluators and to organize program evaluation teams. These could assist school districts and state departments of education in assessing the key parameters of programs of talent and intellectual potential development.
8. To meet the need for teachers who are skilled professionals--who are facilitators and orchestrators of higher cognitive skill and leadership skill development--it is necessary to establish college teacher-training and inservice education programs. These should be supported by a system of fellowships and scholarships.

### Trends

The California Assembly Interim Committee on Education published a report in 1967 in which it stated:

1. Contrary to some popular notions, intellectually superior children are often the neglected children in the classroom.
2. Talent development is an important part of any growing and productive state.
3. Without the intellectual and creative skills to meet the unknown problems of tomorrow, any society will begin a process of stagnation and decay.<sup>12</sup>

There is growing recognition of the truth of these three statements--as evidenced by recent interest expressed by the Education Committee of the State Chamber of Commerce, by an increasing number of inquiries from legislators and members of the executive branch of state government, and by community groups such as The Lyceum of the Monterey Peninsula, The Gifted Children's Association of San Fernando Valley, and The Gifted Children's Association of Los Angeles. There are now 35 identified associations and organizations in California that have as their main interest the needs and provisions for gifted and talented children.

One trend may be the increasing number of program(s) offered on a fee basis (from \$5.00 to \$20.00 per child) by community groups such as the three mentioned above.

Another trend may be increased involvement of parents and other persons as special resource persons to teachers and children.

With the increasing number of financial problems experienced by school districts, attention may be diverted away from special program development and directed more toward the regular program which may be just as inappropriate for the gifted as it is for the borderline mentally retarded child.

Finally, despite the financial plight of school districts, school districts are studying and attempting to implement criterion--referenced teaching and behavioral objectives for children. The motivation for this trend may be to achieve a more rational basis for programs and observable and measurable indices of the success of programs.

There is growing recognition of the need for federal leadership and financial support for educational programs that will develop the intellectual and creative potential of children, youth, and adults. This is needed if we are to solve the horrendous social, economic, and political problems that confront this State and Nation.

It is also needed to make schools places where children can gain knowledge of their abilities and the knowledge and skills needed to become productive and successful adults.

## References

1. California Assembly Interim Committee on Education, Subcommittee on School Curriculum and Pupil Achievement, Building Excellence in the Classroom Assembly Interim Committee Reports 1965-67, Volume 10, Number 24; (Sacramento: California State Assembly; January, 1967).
2. Plowman, Paul D. Guidelines for Establishing and Evaluating Programs for Mentally Gifted Minors (Sacramento: California State Department of Education, 1962).
3. Simpson, Roy E. and Ruth A. Martinson, Educational Programs for Gifted Pupils A Report to the California Legislature Prepared Pursuant to Section 2 of Chapter 2385, Statutes of 1957 (Sacramento: California State Department of Education; January, 1961).
4. Terman, Lewis et al, Genetic Studies of Genius Volume I (of five volumes) Mental and Physical Traits of a Thousand Gifted Children (Stanford, California: Stanford University Press, 1925).
5. Id. Note 3 at p. 1.
6. Sections 3800-3861 Title 5, California Administrative Code (1969) See also Sections 6421-6434 of California Education Code (1969).
7. Bloom, Benjamin S. (Editor) Taxonomy of Educational Objectives: The Classification of Educational Goals - Handbook I: Cognitive Domain. New York: David McKay Co. Inc., 1956.
8. Guilford, J. P. and P. R. Merrifield, The Structure of Intellect Model: Its Uses and Implications. Reports from the Psychological Laboratory, No. 24, Los Angeles: University of California, 1960.
9. Bruner, Jerome S. The Process of Education, Cambridge, Mass.: Harvard University Press, 1960. Also, paperback New York: Vintage Books, 1963.
10. Plowman, Paul D. and Joseph P. Rice Final Report, California Project Talent "Demonstration of Differential Programming in Enrichment, Acceleration, Counseling, and Special Classes for Mentally Gifted Pupils." Project No. D-072. Contract No. OE-10-109; Research Project No. 5-0665 (Sacramento: California State Department of Education, 1969), p. 95.
11. The Gifted Pupil Vol V, No. 1 (Sacramento: California State Department of Education, Spring, 1970).
12. Id. Note 1 at p. 42 and 45.



## Mentally Gifted Minor Program in California Indicates Progress Overall During the Past 45 Years: 1925-1969

The California program for identifying and educating mentally gifted children has a background of progress over a period of years. The following summary of research and more recent legislative support was compiled by Joseph P. Rice, Jr., Chief, Bureau for Mentally Exceptional Children, and by Paul D. Plowman and Irving S. Sato, Consultants, Education of the Mentally Gifted.

- 1925      Lewis Terman of Stanford University publishes first volume of *Genetic Studies of Genius* and therein describes the characteristics of 1,000 California gifted children.
- 1930 1945      Pendulum of interest swings toward the disadvantaged. World War II kindles interest and some commitment in developing scientific talent.
- 1951      San Diego and Los Angeles establish well-thought-out and comprehensive programs for gifted children and youth.
- 1955      California State Department of Education begins to show greater concern for the gifted than it had shown in prior years.
- 1957 1960      Legislature of California sponsors a three-year study, "Educational Programs for Gifted Pupils." This study evaluates 17 different kinds of programs and 929 participating pupils. (Conclusion: "...the special provisions made in these programs were beneficial for the gifted...participating pupils made striking gains in achievement with accompanying personal and social benefits.")
- 1960      Per-pupil annual support levels are documented and recommended by the state study: \$200 for operational expenses, \$40 for initial identification.
- 1961      A.B. 361 (Ch. 883, Stats. 1961) provides \$40 per pupil. This is the total amount available for both identification and operational expenses. Average district expends nearly \$90 per pupil. In-depth studies reveal program costs for special classes; counseling or tutoring still exceeds \$200.
- 1962      State Department of Education employs two full-time consultants in the education of the mentally gifted.
- 1963      State Department of Education receives award of \$249,000 from the Cooperative Research Branch of the U.S. Office of Education. The purpose is to develop and demonstrate special program prototypes for

gifted students in California. Six model school district demonstration centers are established, and materials and curriculums are prepared for enrichment, acceleration, special class, and counseling programs.

- 1965 1966      Nearly 90,000 gifted students are identified and in programs. District discouragement grows with failure of the Legislature to provide additional funds for operating programs. Result is cutbacks in district funds for these programs.

- 1966      Report of Assembly Committee on Education, December 30, 1966, recommends (1) that the Legislature more clearly establish objectives in existing or altered mentally gifted minor programs; (2) that the state increase its support to a maximum of \$200 per pupil per year for program expenses and \$40 per pupil for initial identification; (3) that the state establish a system of scholarships for teachers of academically talented students; (4) that certain restrictive provisions of the Education Code be suspended when such action would improve the educational programs for gifted children; and (5) that there be created a "Statewide Council on Talent Development."

- 1967      A.B. 272 (Ch. 1209, Stats. 1967) increases for one year only the support to \$60 for program expenses and \$40 for identification. Old funding formula is retained. Result is proration of "special allowances" to districts for the gifted program at 55 percent. Surplus of \$14 million is found to offset \$17 million deficit in another special education program. No money is available to offset a \$2 million deficit in the mentally gifted minor program. Several bills for extended support are killed as a result of early adjournment of the State Legislature.

- 1967      In June, 1967, a special study financed by the Legislature again shows the need for increased support. Amounts recommended are \$150 per pupil for program expenses and \$50 per pupil for initial identification.

- 1968      Support reverts to \$40 per year for each mentally gifted minor participating in an approved program. This results because of a one-year termination date in A.B. 272 and early adjournment of the Legislature. Again a proration is made, this time at 84 percent. Because of inadequate funding, many educators become disenchanted with the pros-



- pects of providing programs to stimulate and develop the creative leadership and intellectual potential of children.
- 1968 Senator George Miller states at a hearing on the MGM program that the Legislature has been known to augment programs when sound guidelines are established and the materials and leadership are available.
- 1968 A.B. 364 is passed (Ch. 1230, Stats. 1968), but implementation is contingent upon federal funding. This bill would have established 20 three-year pilot programs for developing techniques of identifying and teaching underachieving, culturally disadvantaged mentally gifted minors. Federal funding is not forthcoming.
- 1968 A.B. 807 (Ch. 1339, Stats. 1968) directs that the State Department of Education (1) develop criteria for identifying underachieving, culturally disadvantaged children as mentally gifted; (2) develop standards for special programs for these children; and (3) conduct a survey to determine the number of such children in special programs for the gifted and the districts providing such programs.
- 1968 1969 Federal Title V, ESEA, money is used (1) to prepare a statewide framework in gifted-child education; (2) to develop curriculum evaluation guidelines; and (3) to produce 36 exemplary curriculum guides in eight subject areas and across four grade-level ranges.
- Approximately 115,000 mentally gifted minors are in special programs in 254 school districts. Most of these children are in "enrichment in the regular classroom," a program which may involve little more than buying a few extra books.
- 1968 1969 State Department of Education finance bill, A.B. 409 (Dent), and two other bills, S.B. 121 (Teale) and S.B. 306 (Rodda), are introduced to increase the level of support to \$150 per pupil per year for operational costs and \$50 per pupil for identification. Three more bills, A.B. 361 (Bagley), A.B. 606 (Veysey), and A.B. 842 (Cory) ask for increased support at other levels of funding.
- 1969 Report is submitted to the Legislature on procedures for identifying underachieving, culturally disadvantaged children as mentally gifted. The reliability and validity of these procedures are not established.
- The funding formula is still based on 2 percent of the average daily attendance of all children in kindergarten and grades one through twelve. Mentally gifted minor population approaches 3 percent. Adding underachieving, culturally disadvantaged children (who may or may not be gifted) could raise the percentage to 4 percent and could cause the need for 50 percent proration unless surplus monies are made available to cover program deficits.
- August 1969 A.B. 606 (Ch. 784, Stats. 1969) provides school districts with \$40 for every child identified as a mentally gifted minor and \$60 for extra program expenses for each identified mentally gifted minor. The funding formula is now based upon 3 percent instead of 2 percent of the average daily attendance of children in kindergarten and grades one through twelve. Increased funding is contingent upon "available free surplus."
- The following is a restatement of the finding of the Assembly Education Committee in 1966:
- We conclude that programs for mentally gifted minors constitute a vital part of the educational system of California, and should be redesigned and reorganized to stimulate the development of the maximum potential of both students and programs. Talent development is an important part of any growing and productive State. Without the intellectual and creative skills to meet the unknown problems of tomorrow, any society will begin a process of stagnation and decay.

## National Project Selects California School Units to Participate in Study

According to Richard A. Rossmiller, Professor of Educational Administration at the University of Wisconsin, the administrative units of the following California school systems have been selected to participate in the National Educational Finance Project Satellite Study on Exceptional Children:

1. Santa Cruz County Superintendent of Schools Office
2. San Diego City Unified School District
3. Mt. Diablo Unified School District, Concord
4. El Rancho Unified School District, Pico Rivera
5. San Juan Unified School District, Carmichael
6. Southwest School Districts Cooperative Special Education Program

This sample of school programs provides good geographic dispersion; one or more units having development centers; Title III and Title VI projects; and four schools which serve a kindergarten through grade twelve population, ranging in one district from about 14,000 pupils to another of about 160,000 pupils.

Preliminary Guidelines  
for the  
IDENTIFICATION OF CULTURALLY DISADVANTAGED SCHOLASTICALLY  
UNDERACHIEVING MENTALLY GIFTED MINORS

by Paul Plowman

December, 1968

1. Early evidence of:

- 1.1 School related learning
- 1.2 Maturation
- 1.3 Active and persistent exploration of environment
- 1.4 Imitation of adult behavior
- 1.5 Questioning of established ways of doing things or of assignments and direction.

2. Unusually resourceful in coping with:

2.1 Responsibilities

- 2.11 Home
- 2.12 School
- 2.13 Work
- 2.14 Other

2.2 Opportunities

- 2.21 Access to resources
- 2.22 Free and/or unstructured time
- 2.23 New Environments
- 2.24 New Experiences
- 2.25 Other

2.3 Deprivations

- 2.31 Economic
- 2.32 Social
- 2.33 Expression, information, planning, communication, exploration
- 2.34 Cultural
- 2.35 Educational

2.4 Problems, Frustrations, and Obstacles

- 2.41 School
- 2.42 Home
- 2.43 Social

2.5 Lack of Structure and Direction

- 2.51 No closure
- 2.52 Poor or irrational organization of:

- 2.521 Time
- 2.522 Work tasks
- 2.523 Learning experiences
- 2.524 Social experiences

2.6 Overly structured settings

- 2.61 With no or few opportunities to explore alternatives
- 2.62 With overemphasis on rigid expectations and with rigid role performance
- 2.63 With no or few opportunities to do things in new ways

3. Playful with:

- 3.1 Materials
- 3.2 People (personal relations)
- 3.3 Ideas

— 4. Sense of humor

5. Products (list)

6. Achievements (list)

7. Skills (list)

8. Scores on intellectual ability tests  
--compared with norms for culturally disadvantaged children

9. Intelligence/achievement scattergram profiles; aptitude test scores

10. Ratings on maturation profiles; e.g. Gesell

# Mentally Gifted Programs Must Be 'Qualitatively Different'

By Paul D. Plowman  
Consultant in Education of the Mentally Gifted  
Bureau for Mentally Exceptional Children

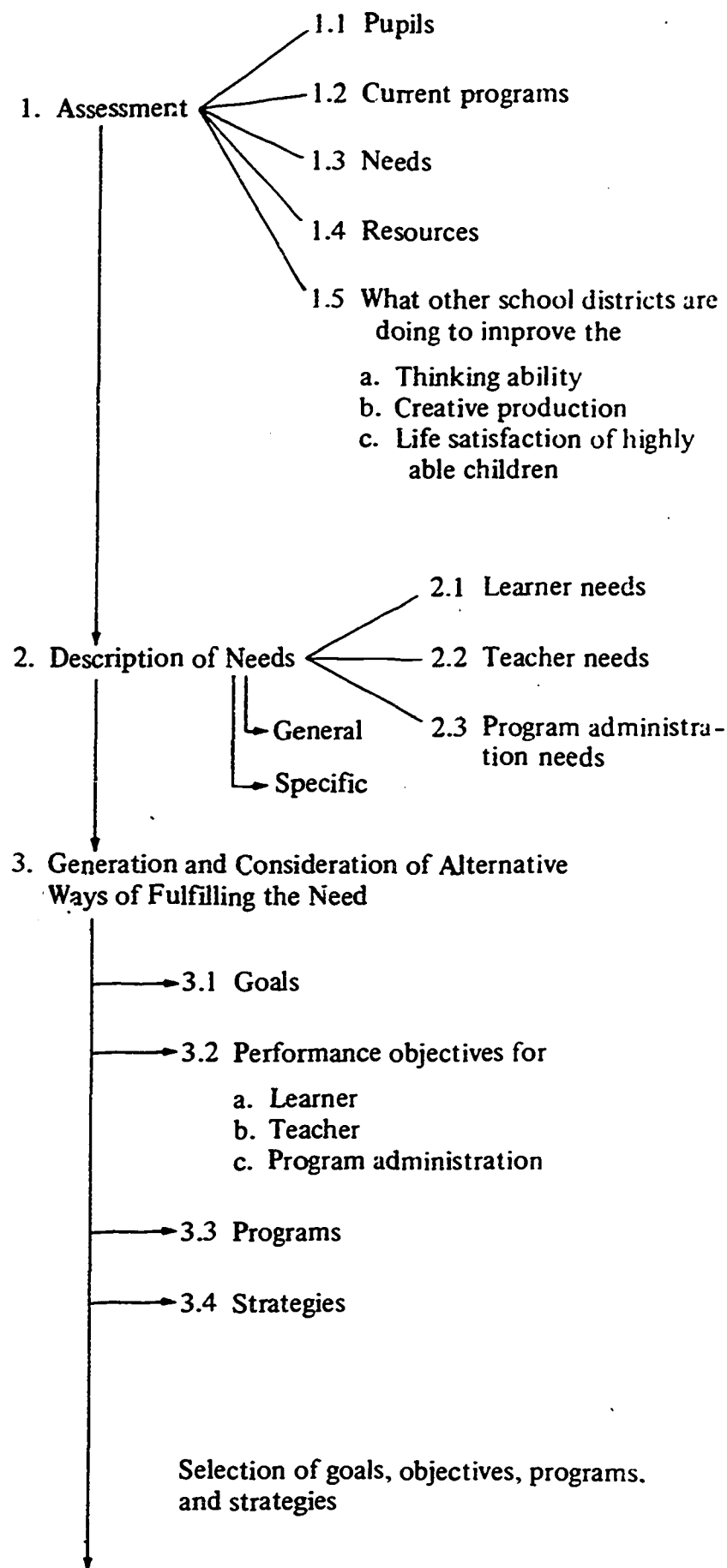
In regulations adopted June 12, 1969, the State Board of Education required as a minimum standard that programs for mentally gifted minors be "qualitatively different" from other school programs of the district because they are intended to meet the specific academic needs and requirements of mentally gifted pupils (California Administrative Code, Title 5, Education, Section 3831(d)). The Board also required that the written program plan referenced in Section 3831(e) include evaluation methods to be used in making "an annual review of pupil progress and of the administration of the program." To secure prior approval of programs (required as of July 1, 1970), school districts will have to demonstrate that the categorical aid requested (up to \$40 for identification and up to \$60 per year for program expenses) will benefit uniquely the category of children for whom the extra state funds are appropriated.

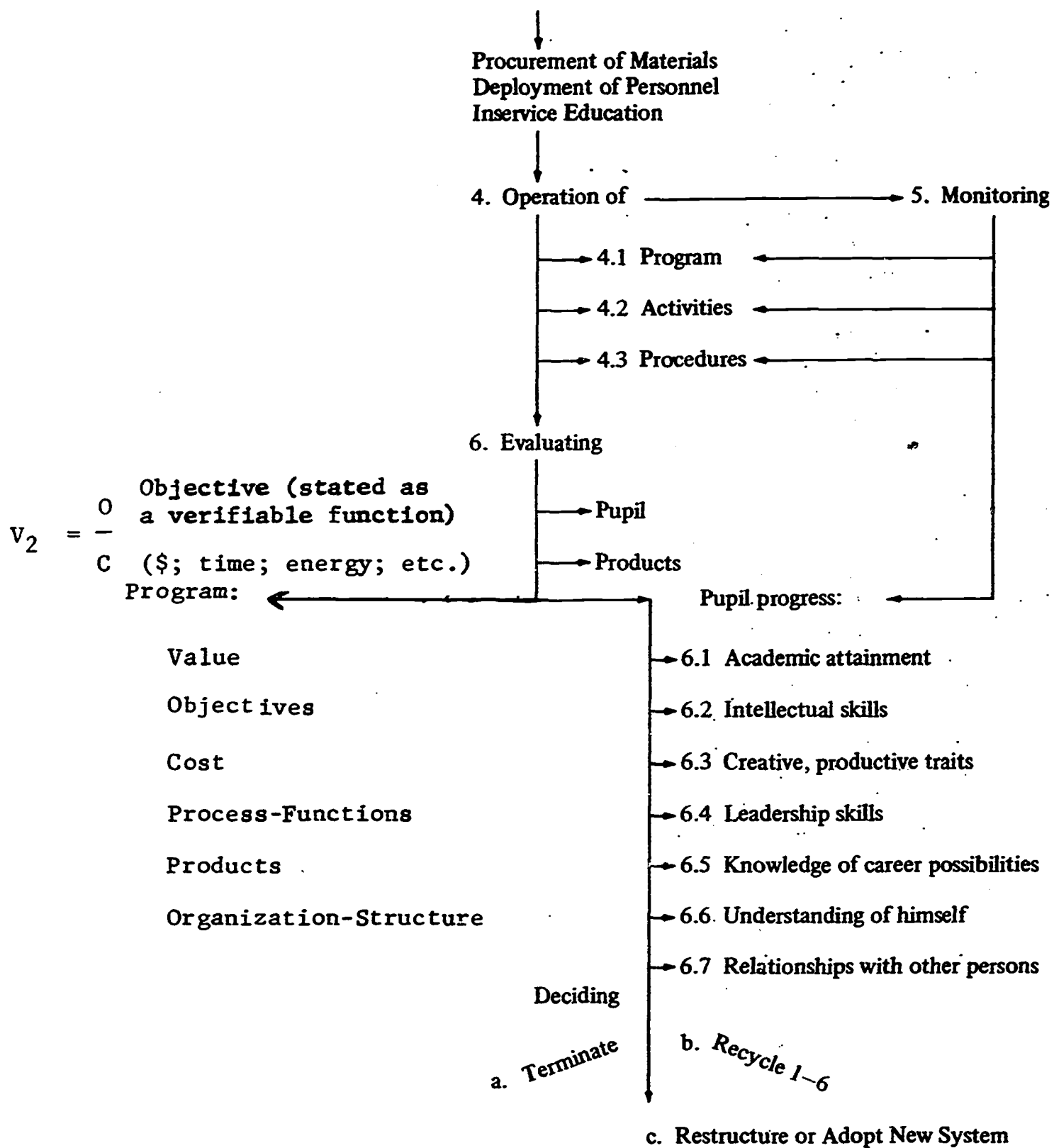
It should be noted that in making the requirement, the Board did not establish a "hard and fast" definition of what is or what is not "qualitatively different." The State Department of Education believes that this definition is not something to be outlined at the state level and then handed down to school districts. Rather, it believes that there is great value to district personnel in attempting to resolve this matter (1) at the school district level; and (2) in terms of the unique capabilities and characteristics of pupils, programs, and teachers within the districts.

To help school districts in this planning, the state consultants in the education of the mentally gifted conducted five regional meetings in March, 1970. At these meetings they (1) reviewed the general program objectives, the specific learner objectives, and the necessity of developing and applying specific performance objectives; (2) gave a multimedia presentation on "Sparkle and/or Substance - Ways of Working with the Gifted"; (3) reviewed the value of state-developed curricular publications, films, and filmstrips; and (4) in a question-and-answer period, attempted to help districts plot their own courses in defining pupil, program, and teacher needs and requirements. With the help of the sponsoring school districts, panel presentations were also made on two topics: "Creative Ways of Organizing 200 Minutes Per Week of Per-Pupil Participation" and "What Are

the Earmarks of a Qualitatively Different Program?"

The following steps are presented as means of conceptualizing the process of achieving "qualitatively different" programs:





Note: Program category added 8/10/70



# Factors Which Affect Educational Programs, School Experience, and Development of Human Potential

Listed on this chart are certain intellectual skills and certain traits of creativity. Complete the chart indicating which skills and traits receive a major emphasis in stated objectives, classroom dialog, assignments, curricular materials, and examination questions in your gifted child or talent development program.

	Educational Objectives	Classroom Dialog	Assignments	Curricular Materials	Examination Questions
1. Translation					
2. Interpretation					
3. Extrapolation					
4. Application					
5. Analysis					
6. Synthesis					
7. Evaluation					
8. Divergent Thinking					
9. Convergent Thinking					
10. Evaluative Thinking					

1-7 - from The Taxonomy of Educational Objectives: Cognitive Domain by Bloom et alii.  
8-10 - from "The Structure of the Intellect" by J. P. Guilford.



ASSEMBLY INTERIM COMMITTEE REPORTS

1965-1967

Volume 10

Number 24

BUILDING EXCELLENCE IN THE CLASSROOM

A Study of State Textbook Programs, Diploma Standards,  
Testing Programs, and Programs for Gifted Children

by the

SUBCOMMITTEE ON SCHOOL CURRICULUM  
AND PUPIL ACHIEVEMENT

Assembly Interim Committee on Education

MEMBERS OF THE SUBCOMMITTEE

Winfield A. Shoemaker, Chairman  
E. Richard Barnes  
Willie L. Brown, Jr.  
Jack T. Casey  
Houston I. Flournoy  
Charles B. Garrigus  
Victor V. Veysey

JANUARY 1967

Michael A. Manley, Consultant  
Gilbert M. Ostler, Staff Analyst  
Cristine B. Trask, Secretary  
Walter G. Howald, Legislative Intern  
(September 1965-June 1966)  
Bruce W. Robeck, Legislative Intern  
(September 1966-January 1967)

Published by the  
ASSEMBLY

OF THE STATE OF CALIFORNIA

Jesse M. Unruh	Carlos Bee
Speaker	Speaker pro Tempore
George N. Zenovich	Robert T. Monagan
Majority Floor Leader	Minority Floor Leader

James D. Driscoll  
Chief Clerk

## PROGRAMS FOR MENTALLY GIFTED MINORS

### Findings

1. We conclude that programs for mentally gifted minors constitute a vital part of the educational system in California, and should be redesigned and reorganized to stimulate the development of the maximum potential of both students and programs. Talent development is an important part of any growing and productive state. Without the intellectual and creative skills to meet the unknown problems of tomorrow, any society will begin a process of stagnation and decay.
2. We find that citizens, teachers, and administrators are confused about the objectives of state involvement in programs for mentally gifted minors. Legislative intent is not clearly enough understood to permit long-range planning of operating or capital expenditures. We believe that confusion about the nature, extent, and duration of state involvement in the MGM program has stifled local initiative and innovation in developing a meaningful educational experience for academically talented children.
3. It is the committee's conclusion that the level and method of state financing for mentally gifted minors does not meet the monetary needs of local school districts or fulfill the intent of stimulating novel change in the evaluation of gifted children. In far too many cases, we find that what is being passed off as a gifted program is no more than is given in ordinary classes with just a few more books for the children to read. The state has not made an attempt to assess the financial accuracy of district expenditures, therefore it is difficult to evaluate the effectiveness of "enrichment" programs in regular classroom instruction. The school districts that have made a good faith attempt to establish quality education for the gifted are encouraged to cut back their efforts, partly because of a low level of state aid in this area.
4. We conclude that academically talented students demand equally talented teachers, teachers who have the proper training to respond to advanced subject matter interests, inspire high achievement, and handle special problems created by the uniqueness of the children served. While there are many excellent teachers in the MGM program, it is important that the best qualified teachers continue to serve in this area. Teachers of unique children should have unique combinations of training and experience so that talent development for children does not become teacher training and development.
5. The committee believes that many state laws, particularly those that mandate curriculum content and minutes of instruction, require the use of state adopted and supplied textbooks, and limit teacher credentials to specified grade levels, unnecessarily restrict instruction of gifted students.
6. We find that the results, innovations, and instructional improvements of the MGM program have not been adequately circulated to the public schools and members of the interested public throughout the state. As a consequence of the lack of publicity, the MGM program has not realized its full potential benefit to the educational system as a whole.

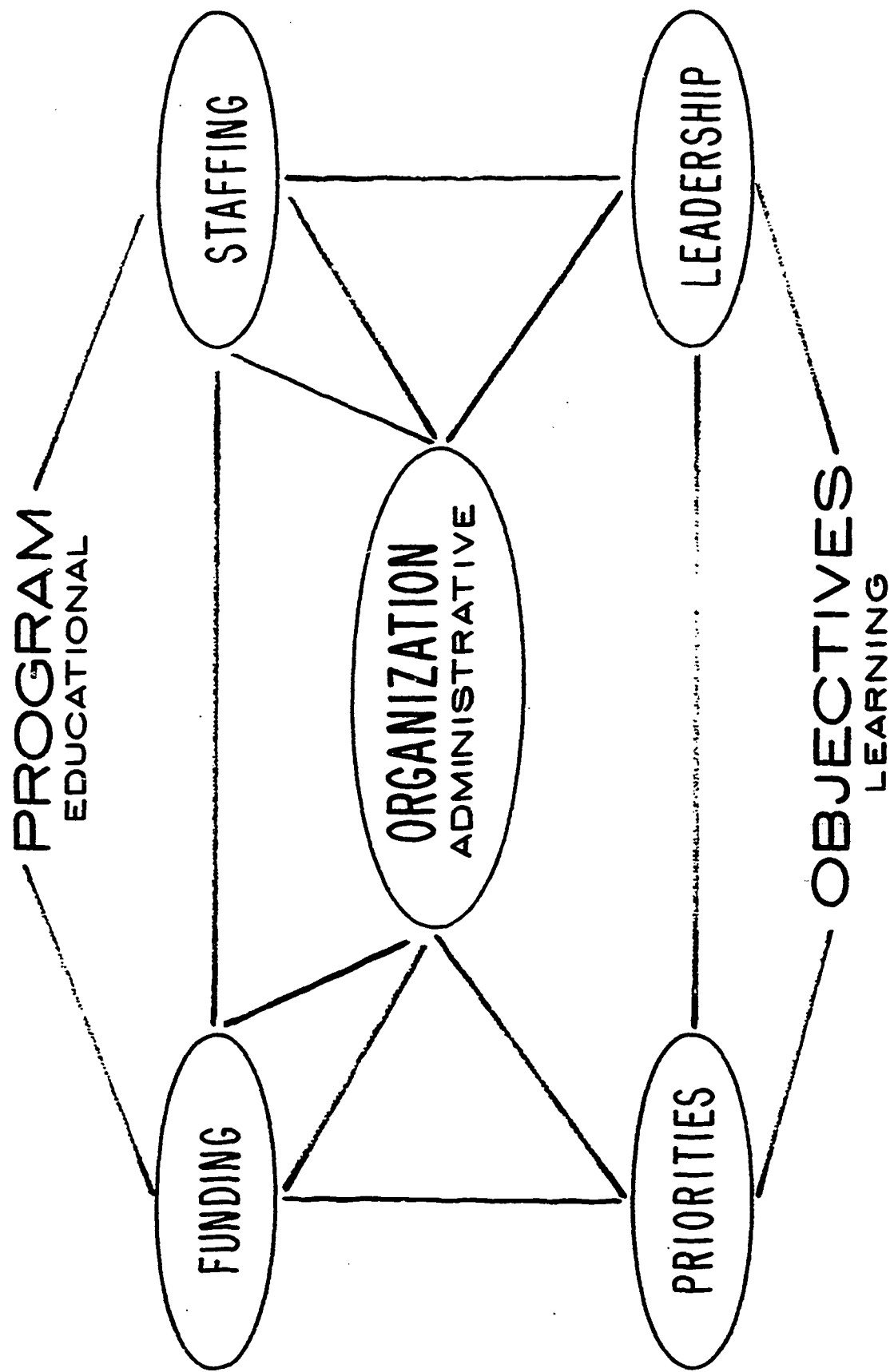
## RECOMMENDATIONS

1. Special programs for mentally gifted minors should be viewed as a part of the task of educating all children. Extraordinary children require extraordinary school experiences just to have equality of treatment with average children who are exposed to an average program. Such aims are in sympathy with a long-standing principle that education should proceed from the starting point of individual need. We recommend that legislation more clearly establish the objectives in existing or altered MGM programs, and that the education of gifted children be given a more prominent place within the efforts of public schools.
2. The present rate of state support for mentally gifted minors (\$40 per gifted student) covers the cost of identification but not the local school district program. School districts have been encouraged to institute programs of regular classroom enrichment which appear inexpensive on paper, but are of dubious educational value. Therefore, we recommend that the state increase its support to a maximum of \$40 for identification and \$200 for programs. The method of state aid should be project oriented and the ratio of state-local financing should be equalized by the wealth of the school district. School districts should be required to report the total cost of all MGM programs so that planning and study at the state level may be more complete and useful. We recommend that a sample of the existing school district programs for mentally gifted minors be audited by the Office of the Auditor General to investigate the validity of expenditures that have been claimed for excess cost reimbursement.
3. We recommend that the state establish a system of scholarships for teachers of academically talented students to provide them with advanced training in subject matter specialties or in methods of teaching gifted children. Teachers should be encouraged to participate in federally supported programs, such as the National Science Foundation summer grants for science and foreign language teachers.
4. We recommend that school districts be encouraged to seek the best qualified teachers, both in subject matter training and demonstrated competence in teaching ability, and that some of the additional salary cost be offset by state aid. The districts should be required to make full utilization of these special teachers in planning, supervision, and development of programs for MGM, and released time for these activities should be included in budgetary estimates.
5. We recommend that state teaching credential restrictions on the grade level that can be taught be suspended for MGM programs, if it is certified that a teacher who is not ordinarily authorized to teach a particular grade level is the best available teacher for the gifted program and if the State Board of Education so approves.

6. Because of the gifted child's unique ability to learn, qualitative and quantitative variations in school curriculum and methods of instruction must be made available in order to promote the maximum growth of the child's mental powers. We recommend that provisions of the Education Code which specify certain subject matter and hours of instruction for public schools be suspended, upon approval of the State Board of Education, for authorized programs of instruction for mentally gifted minors. Any alteration of required instruction would have to be made on the basis of improvement and enrichment of the program for the academically talented. Proper attention should be given to teaching basic skills where it is necessary for the educational development of these children.

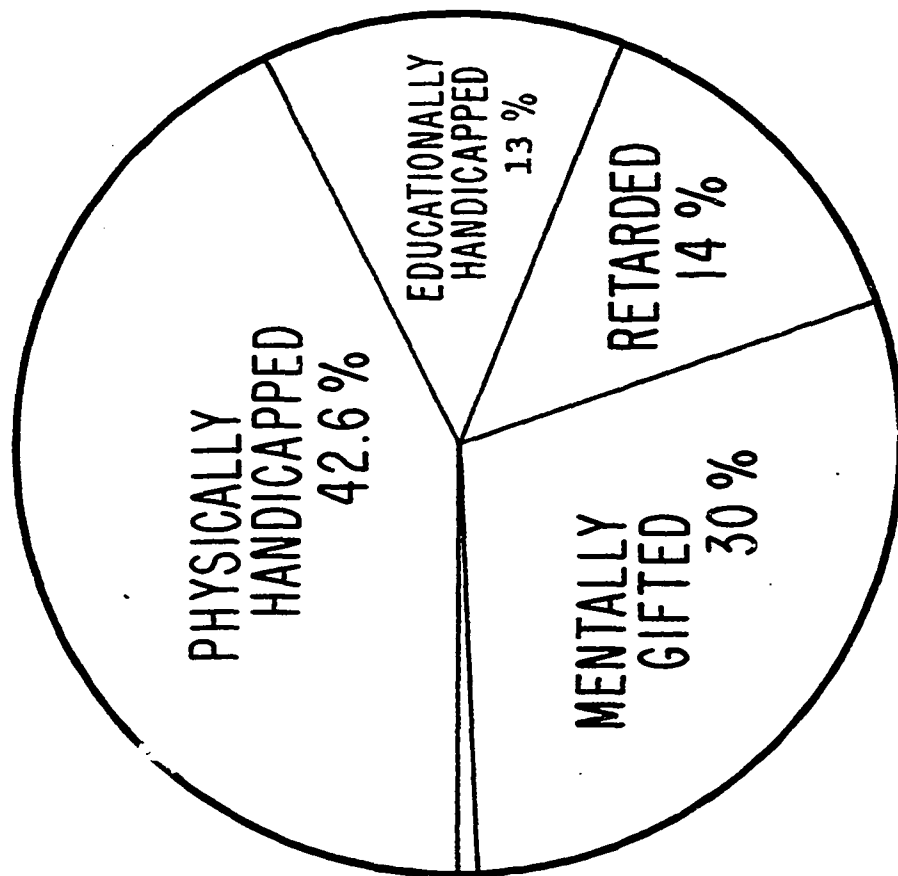
7. We recommend the creation of a "Statewide Council on Talent Development," composed of lay and professional persons from all areas of public and private life, which would serve to study methods to improve the education of mentally gifted minors, transmit innovations in curriculum and instructional techniques to the public school authorities of the state, and stimulate improvements in the quality of education offered to all of the school children. The statewide council would be charged with the responsibility of presenting to the Legislature specific and periodic proposals for the improvement in public education for the academically talented and school children as a whole.

# POSSIBLE DIRECTIONS



# PUPIL ENROLLMENT IN SPECIAL EDUCATION

1970-1971



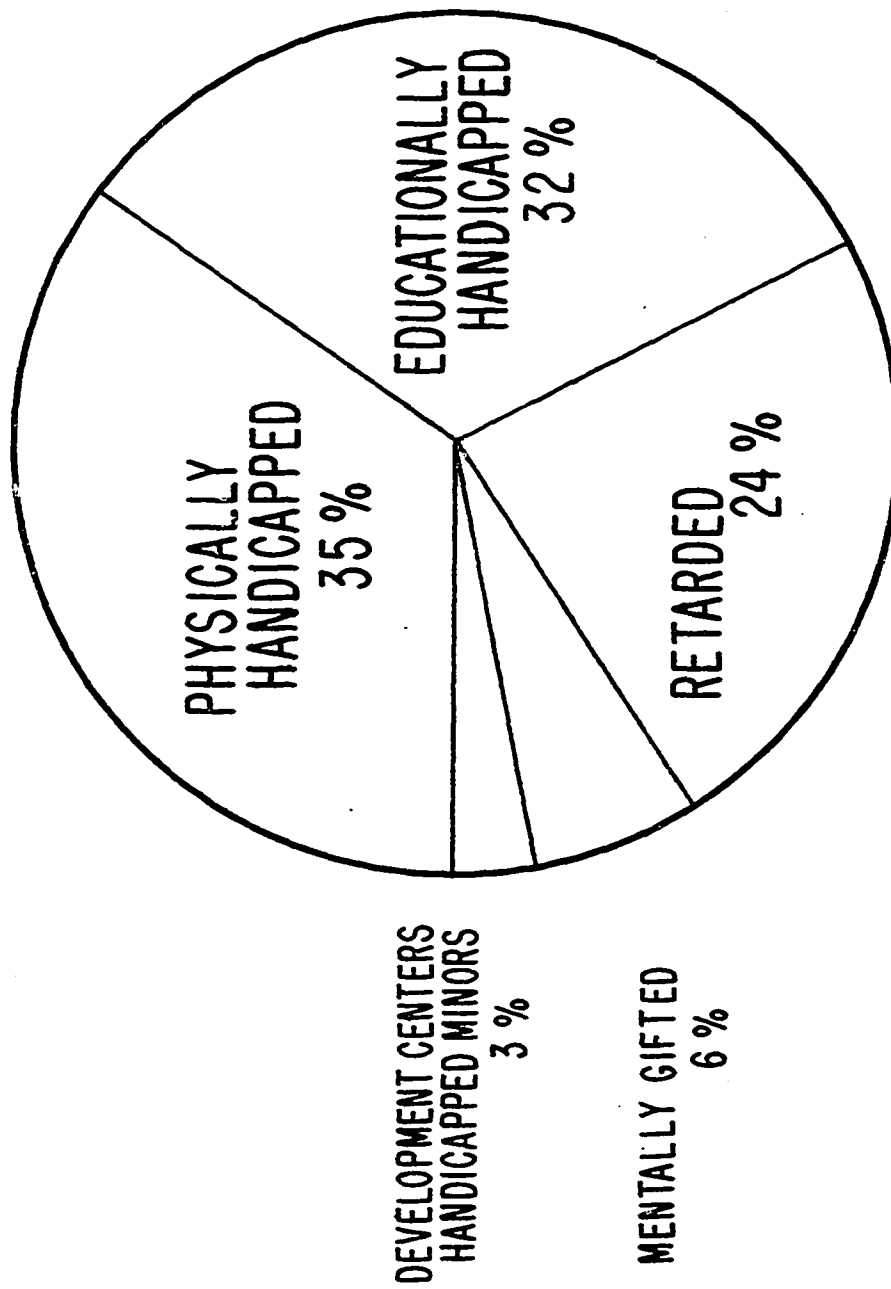
DEVELOPMENT CENTERS  
HANDICAPPED MINORS  
0.4 %

D-1 REPORT  
SPRING 1971



# STATE FUNDING FOR SPECIAL EDUCATION

1970-1971



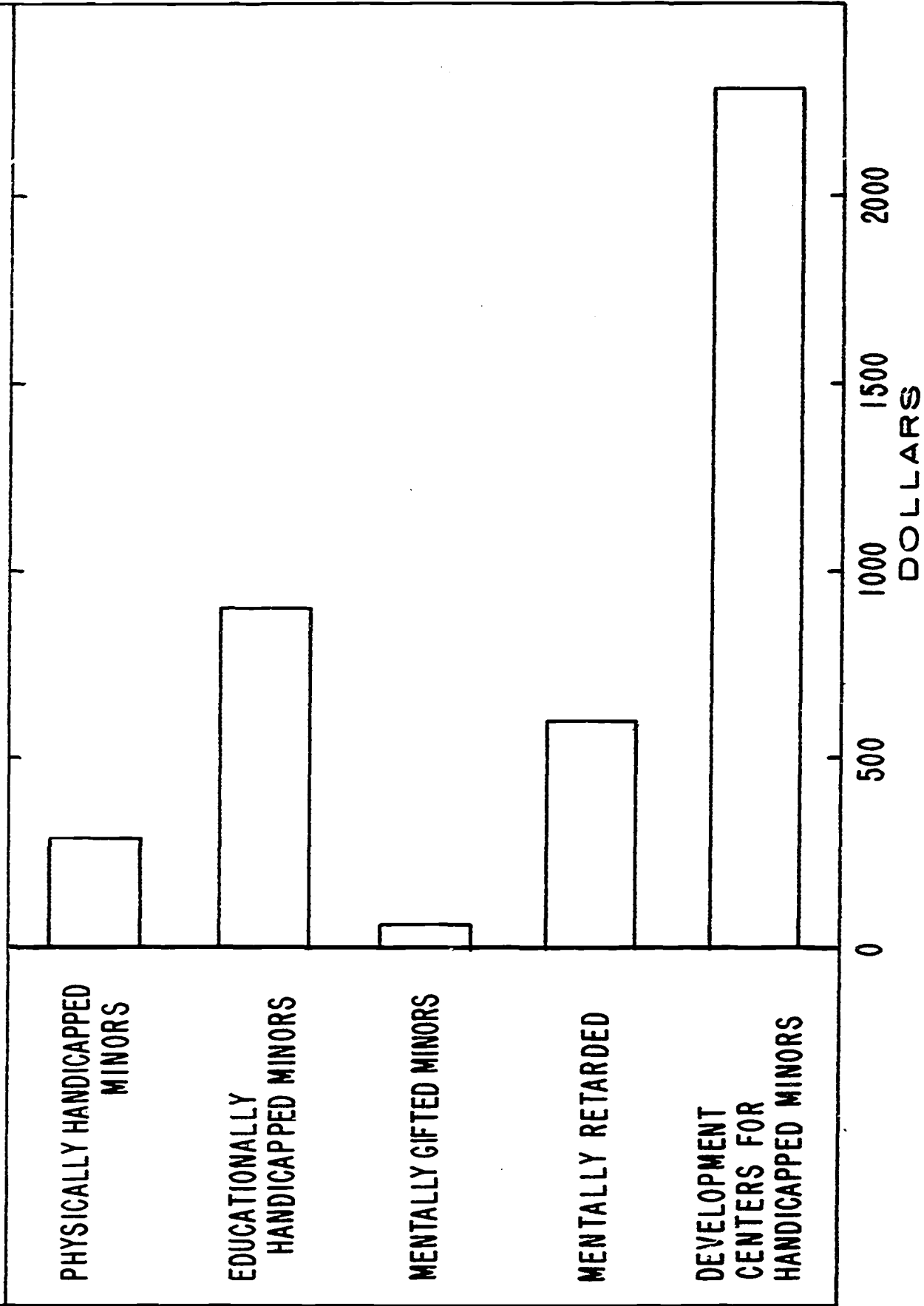
SECOND PRINCIPAL  
APPORTIONMENT  
JUNE 25, 1971

SPECIAL EDUCATION		
CATEGORY	SPRING 1971 % CHILDREN	1970-1971 % STATE FUNDS
PHYSICALLY HANDICAPPED MINORS	42.6 173,426	35 \$51,536,000
EDUCATIONALLY HANDICAPPED MINORS	13 50,988	32 \$46,135,000
MENTALLY GIFTED MINORS	30 123,039	6 \$8,256,000
MENTALLY RETARDED	14 57,777	24 \$34,862,000
DEVELOPMENT CENTERS FOR HANDICAPPED MINORS	0.4 1,804	3 \$4,142,000
T O T A L S	PROGRAM ENROLLMENTS 407,034 FROM D-1 REPORT	EXPENDITURE \$144,926,000 2ND PRINCIPAL APPORTIONMENT

SPECIAL EDUCATION		
CATEGORY	SPRING 1971 % A.D.A.	1970-1971 % STATE FUNDS
PHYSICALLY HANDICAPPED MINORS	14 33,301	35 \$51,536,000
EDUCATIONALLY HANDICAPPED MINORS	13 33,010	32 \$46,135,000
MENTALLY GIFTED MINORS	48 117,703	6 \$8,256,000
MENTALLY RETARDED	24 57,813	24 \$34,862,000
DEVELOPMENT CENTERS FOR HANDICAPPED MINORS	1 1,800	3 \$4,142,000
T O T A L S	243,627 SCHOOL APPORTIONMENTS REPORTS	EXPENDITURE \$144,926,000 2ND PRINCIPAL APPORTIONMENT

AVERAGE DAILY ATTENDANCE  
 ESTIMATE

# SPECIAL EDUCATION PER CAPITA COST



COMPARISON: ILLINOIS & CALIFORNIA				
1961 - 1971				
GIFTED CHILD PROGRAM	Nº PARTICIPATING PUPILS (K - 12)	Nº SCHOOL DISTRICTS	Nº STATE STAFF POSITIONS (CONSULTANT)	
CALIFORNIA				
1961-62 (FIRST YR)	38,700	188	2	3
1970-71	123,000	243 (W/ EST. 95% PUPIL ENROLLMENT)	2	2
ILLINOIS				
1963-64 (FIRST YR)	—	78	2	2
1967-68	54,000	883	10	10
1970-71	75,200	365	12	12
TOTAL ENROLLMENT (NOT FULL-TIME EQUIVALENTS)				